



**Washington State
Department of Transportation**

Washington State Truck Parking Survey Summary Report



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Executive Summary

Background, Objectives, and Methodology

The Washington State Department of Transportation (WSDOT) is interested in improving truck parking services along I-5, I-90, and I-82. Current federal regulations require truck drivers to take 10-hour rest periods after 11- hours of driving in a 14-hour period. Therefore, trucks need a place to park during these 10-hour rest periods, and trucks also require short-term parking when they are waiting to make a delivery or to pick-up a load.

PRR conducted two online surveys to establish how truck drivers and trucking companies view the adequacy and availability of truck parking and services in Washington State. These surveys were directed at truck drivers who drive in Washington, and trucking companies who have operations in Washington.

Truck drivers and trucking companies were notified about the surveys through emails from WSDOT directing them to the online survey websites. Emails were sent to WSDOT's freight email contact list, and the membership lists for trucking associations across the US – including the American Trucking Association, the Washington Trucking Association, and the Oregon Trucking Association among many others. The online surveys were also publicized in several online trucking industry publications and on trucking programs on satellite radio. Four-hundred and seventy-three truck drivers answered the truck driver survey, and ninety-nine trucking companies answered the truck company survey.

In addition to obtaining input from the trucking industry, PRR interviewed several members of the Washington State Patrol who work for the Patrol's Commercial Vehicle Division. Among other responsibilities, this Division is responsible for truck weigh stations; enforcing truck size, weight and load laws; conducting truck safety inspections; reviewing driver logs; and handling illegally parked trucks and truck

trailers. We were interested in obtaining the Patrol's views on the adequacy of current truck parking areas, where it makes sense to add new or increase existing truck parking, what facilities should be available at these areas, and what parking facility design considerations would help the Patrol do their job.

Public and Commercial Truck Parking and Amenities are Important and Well Used

- Truck parking along I-5, I-90, and I-82 is viewed as somewhat or very important by 73% of truck drivers, and somewhat or very important by 70% of truck companies surveyed.
- When asked which they preferred, the majority of truck drivers (60%) and trucking companies (55%) indicated that either a public rest area or a commercial truck stop suited their purposes for truck parking.
- Trucks typically park at public rest areas and commercial truck stops in the evening (56%), or overnight (79%). The average length of stay at these stops is 6 to 10 hours for 23% of drivers, while 59% reported they are stopping for their 10-hour rest period.
- When drivers in Washington State stop for their 10-hour rest period, they reported that the majority of the time (56%) they stay at a commercial truck stop, 16% stay at a public rest area, and 22% stay somewhere else. Most of those drivers reported that they either parked at home, or they parked roadside, or at a private yard controlled by their trucking company.
- Trucks currently use all the available commercial truck stops along I-5, I-90, and I-82 for staging and/or waiting, short to medium term parking (>1 hour to < 10 hours), and for their 10 hour rest periods.
- Drivers like the amenities available at commercial truck stops. They indicated that that they currently and most frequently use rest rooms (94%), truck parking (93%), fueling services (93%), restaurant (87%), showers (86%), and stores (77%).

- Trucks also currently use all the available public rest areas along I-5, I-90, and I-82 for staging and/or waiting, short to medium term parking (>1 hour to < 10 hours), and for their 10 hour rest periods. In general, public rest areas are used less for 10 hour rest periods than are commercial truck stops.
- Drivers also use the amenities provided at the public rest areas. They indicated that they currently use the rest rooms (96%), the separate truck parking (83%), and the vending machines (31%).

Truck Parking is Unavailable, Overcrowded and Too Far Apart

- When truck drivers were asked how often they parked in areas other than public rest areas and commercial truck stops, only 17% said they never did this. Fifty-six percent of drivers responded that they parked in other areas less than 50% of the time, and 27% responded that they parked in other areas more than 50% of the time.
- Trucking companies think their trucks park outside of public rest areas and commercial truck stops much less than reported by the truck drivers. They responded that 9% of their trucks never do this, 65% do this less than 50% of the time, and 24% do this more than 50% of the time.
- Drivers responded that the major barrier to using existing truck parking is overcrowding. Ninety-five percent reported this as the major barrier. The other major barrier reported is location: either too far apart (46%), or in the wrong place (44%).
- Eighty-eight percent of the trucking companies also responded that the major barrier to their trucks using existing truck parking along I-5, I-90, and I-82 was overcrowding. The other major barrier was location with 41% saying they were too far apart, and 36% saying there were in the wrong places.

New Truck Parking is Most Needed in Urban Areas and at Snoqualmie Pass

- When truck drivers were asked to pick their top 3 choices for where additional truck parking should be made available, the five most popular choices were: Seattle (52%), Tacoma (45%), Federal Way (27%), North Bend (19%), and Spokane (19%).
- When trucking companies were asked for their top 3 choices for locations to place additional truck parking, the five most popular choices were: Seattle (50%), Tacoma (38%), Federal Way (27%), Snoqualmie Pass (17%), and Vancouver (16%). Trucking companies ranked Spokane (13%) sixth, and Olympia and North Bend (11%) tied for seventh.
- While a small percentage (7%) of truck drivers would only be willing to use new or enhanced truck parking if it was directly accessible from the Interstate, 53% of truck drivers would be willing to drive up to one mile, with a quarter of those drivers willing to drive up to 2 miles, and another quarter willing to drive up to 3 miles to use new or enhanced truck parking.
- When asked how important new or enhanced truck parking was along SR-167 and at the Ports of Seattle and Tacoma, a majority of truck drivers (56%) responded that it was either somewhat important (20%), or very important (36%). Trucking companies did not think this was as important as the drivers did with only 43% responding that it was either somewhat important (21%), or very important (22%).
- Both the truck drivers (79%) and the trucking companies (71%) did respond that it is more important to have new or enhanced truck parking along I-5, I-90, and I-82, than along SR 167 and at the Ports of Seattle and Tacoma.

Interest in Amenities at New Truck Parking Areas is Strong

- Truck drivers use both public rest areas and commercial truck stops for different reasons. They prefer to stop at commercial truck stops for their 10-hour rest periods because of the variety of amenities available, but use both public rest areas and commercial truck stops for short and long term truck parking needs.
- When asked to pick from a list of amenities those which they would be somewhat or very likely to use at a new or enhanced parking area, truck drivers' top five choices were: easy access to the Interstate (97%), rest rooms (96%), paved lot (96%), separate truck parking (96%), and lighting (96%).
- When trucking companies were asked to pick from the same list of amenities those which they felt their drivers would be somewhat or very likely to use, their top five choices were: rest rooms (92%), lighting (92%), paved lot (92%), easy access to the Interstate (91%), and separate truck parking (90%).
- A majority of truckers say they would be likely or very likely to use all but two proposed amenities, suggesting strong market interest in various services.

Truck Drivers and Trucking Companies are Not Willing to Pay for Truck Parking

- Truck drivers and trucking companies say they are not willing to pay for truck parking during their 10-hour rest periods.
 - For truck drivers, around two-thirds (69%) would not pay while 26% would pay between \$1 and \$9, 5% would pay between \$10 and \$19.
 - For trucking companies, responses were very similar with 71% not willing to pay, 20% willing to pay between \$1 and \$9, and 7% willing to pay between \$10 and \$19.
- While truck drivers appear to be equally likely or unlikely to use an online or call-in reservation system to find available parking and reserve it, a majority of trucking companies responded that they would be somewhat to very unlikely to have their drivers use such a system.

Summary of Truck Driver and Trucking Company Comments

We received extensive comments from both the truck drivers and the trucking companies who responded to the online surveys. The following summary includes the most prevalent comments:

- Truck drivers and trucking companies do not want to pay for parking. They believe they already pay enough with all the taxes they pay.
- There is not enough truck parking available in Washington. This is especially true in the Seattle/Tacoma metropolitan areas.
- Truck drivers are frustrated by having to follow the hours-of-service requirements, and then not have adequate parking when they are required to stop to rest.
- RVs and other personal vehicles take up truck parking space at the public rest areas that should be available for truck parking.
- WSDOT should create new truck parking by expanding existing truck parking, making truck only parking available and working with private companies in industrial areas to make parking available overnight. There is also a need to expand the chaining areas on both west and east sides of Snoqualmie Pass.
- Some of the existing truck parking is difficult to use due to its design: it's not long or wide enough. This is especially true for over-size trucks.

Comments from the Washington State Patrol Commercial Vehicle Division

- Officials from the Patrol's Commercial Vehicle Division (CVD) made the following statements about truck parking in Washington State.
- The Patrol's CVD officers (and troopers) do not enter private facilities, such as commercial truck stops unless they are called in for some reason. Local law enforcement officials typically will handle anything that happens on private property.

- Truck inspections primarily take place at the weigh stations. The Patrol's CVD officers do not patrol public rest areas; the Patrol's Troopers may patrol public rest areas, but only ticket trucks and drivers with obvious violations.
- Officials interviewed said that there is not enough truck parking available. Trucks routinely park on freeway on-ramps and off-ramps and along the road. At the same time, these officials noted that many truck drivers do not plan out their rest stops, and tend to stop and park when they reach the end of their service hours, even if they are within a few miles of a truck parking area.
- Locations where additional parking would be helpful include: Seattle/Tacoma, Vancouver, north of Marysville, Cle Elum, and between Yakima and Ellensburg.
- Additional parking could be developed at the chaining areas on both sides of Snoqualmie Pass. This would improve safety during chaining season, and provide additional truck parking throughout the year. If expanded enough, combination chaining and parking areas could permit trucks to chain up, or wait for a storm to clear, as opposed to forcing them to chain up and go or turn around as they sometimes must do today.
- It makes sense for WSDOT to try to attract private companies to develop additional commercial truck stops in the state, along with looking for opportunities to develop and expand public truck parking areas as truck drivers use these two types of areas for different lengths of rest.
- Officials recommended that the 8 hour parking limitation (and signs) at public rest areas be changed to 10 hours to accommodate truckers. At least one official suggested designated public truck parking areas to keep RVs segregated. However, given that this is a summer only constraint, maximizing use of limited public parking may require further review.

Recommendations

Given the truck driver and trucking company survey results, and the input provided by officials from the Washington State Patrol's Commercial Vehicle Division, PRR recommends:

- Consideration be given to extending the 8-hour parking limitation at public rest areas to 10-hours.
- Allocation of parking within public rest areas be reviewed to maximize use and reduce conflicts with RVs.
- Survey findings be packaged and presented to private commercial truck stop developers to assess their interest in partnering to improve truck parking needs.
- Assessing the mix of amenities required to support a private commercial truck parking operation.
- Assessing local jurisdiction willingness to assist in providing space and services within target expansion areas.
- Using the findings from meeting with private commercial truck stop developers to assess land owner interest in key target areas.
- Assessing short- and long-term improvements to expand chain-up areas on both sides of Snoqualmie Pass.
- Considering options to provide smaller, but more numerous overnight truck parking areas in target areas, such as by partnering with industrial property owners.

Introduction

Background and Objectives

The Washington State Department of Transportation (WSDOT) is interested in improving truck parking services along I-5, I-90, and I-82. The goal of these improvements is to improve roadway safety by decreasing the number of trucks parked illegally, and by providing truck drivers a safe and legal place to park when they become fatigued. Current federal regulations require truck drivers to take 10-hour rest periods after 11-hours of driving in a 14-hour period. Therefore, trucks need a place to park during these 10-hour rest periods, but often parking is not available when drivers reach their hours-of-service limit. Past studies have shown a shortage of truck parking exists along I-5, I-90, and I-82, and these shortages have led to trucks parking illegally on freeway on- and off- ramps and shoulders. In addition to truck parking shortages for 10-hour driver rest periods, short-term parking and areas for staging and waiting are also in short supply along these corridors.

To help shape its proposals for new or improved truck parking facilities, WSDOT is interested in determining where trucks currently park and what services they use at these truck parking facilities. WSDOT is also interested in understanding where truck drivers, and trucking companies that operate in Washington State think new or improved truck parking is needed and what services should be provided.

Methodology

In consultation with WSDOT, PRR developed two online surveys to establish how truck drivers and trucking companies view the adequacy and availability of truck parking and services in Washington State. These surveys were directed at truck drivers who drive in Washington, and trucking companies which have operations in Washington. Survey questionnaires are found in Appendices A and B.

Truck drivers and trucking companies were notified about the online surveys through emails from WSDOT directing them to the online survey sites. Emails were sent to members of the American Trucking Association which has a nation-wide membership, and to the members of trucking associations in Washington, Oregon, California, Utah, Montana, Idaho, and British Columbia. WSDOT also utilized its WSDOT Freight Listserv, which has about 3,000 email addresses for people and companies interested in the Washington freight industry. Other organizations that emailed their memberships on behalf of WSDOT include: The Owner/Operator Independent Drivers Association, The National Private Truck Council, Landstar Carriers, the Ports of Seattle and Tacoma, and the Seattle DOT.

WSDOT Freight Systems Division staff was also interviewed on several satellite radio trucker channels about the truck parking survey effort and listeners were encouraged to respond and instructed how to access the online surveys. The truck parking online surveys were also publicized in several online trucking industry publications. The online surveys were live from March 3rd to March 23rd. During that time, 473 truck drivers completed the truck driver survey, and 99 trucking companies completed the truck company survey.

The online survey for truck drivers and the online survey for trucking companies were designed to provide the following information for WSDOT:

- Where trucks currently park,
- When and how long they park,
- What services they use where they park,
- What improvements should be made at truck parking areas,
- Where it makes the most sense to increase available truck parking, and
- Where additional truck parking areas should be developed.

In addition to obtaining input from the trucking industry, PRR interviewed three members of the Washington State Patrol who work for the Patrol's Commercial Vehicle Division. Among other responsibilities, this Division is responsible for truck weigh stations, enforcing truck size, weight and load laws, conducting truck safety inspections, reviewing driver logs, and handling illegally parked trucks and truck trailers. We were interested in obtaining the Patrol's views on the adequacy of current truck parking, where it makes sense to add new or increase existing truck parking, what facilities should be available at these areas, and what design considerations would help the Patrol do their job at these areas.

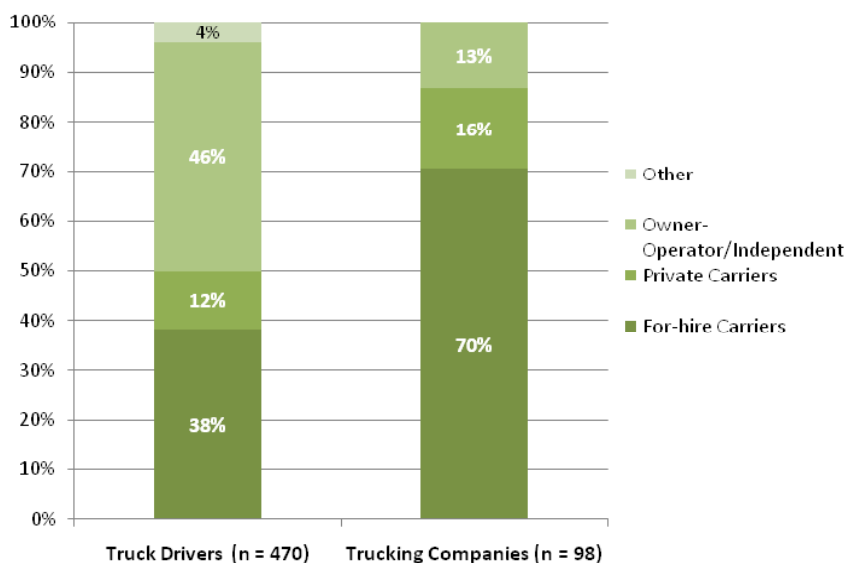
Data Processing and Analysis

Simple tabulations of responses to each survey question were conducted within PRR's online survey software and these results can be seen in Appendices C and D. Cross-tabulation analysis was conducted with SPSS and involved the use of appropriate tests (in this case Cramer's V¹) to test for the statistical significance of relationships between variables. Throughout this report relationships between variables that are statistically significant at the .05 level or better and that are meaningful to an understanding of the data will be reported.

Truck Driver and Trucking Company Characteristics

Truck drivers typically work for either a private carrier, or a for-hire carrier. Private carriers are a private company's own fleet of trucks, like Wal-Mart or Weyerhaeuser, where the primary business is not trucking. For-hire carriers provide trucking services as their primary business. They are hired by other companies to move their goods. Well known examples include UPS and J.B. Hunt Transport Services. Truck drivers may also own and operate their own trucks and operate independently of large private and for-hire carriers, but work on contract to private or for-hire carriers, or other businesses. Figure 1 shows the types of carriers represented by the trucking companies, and the type of carrier represented by truck drivers work.

Figure 1 - Type of Carrier

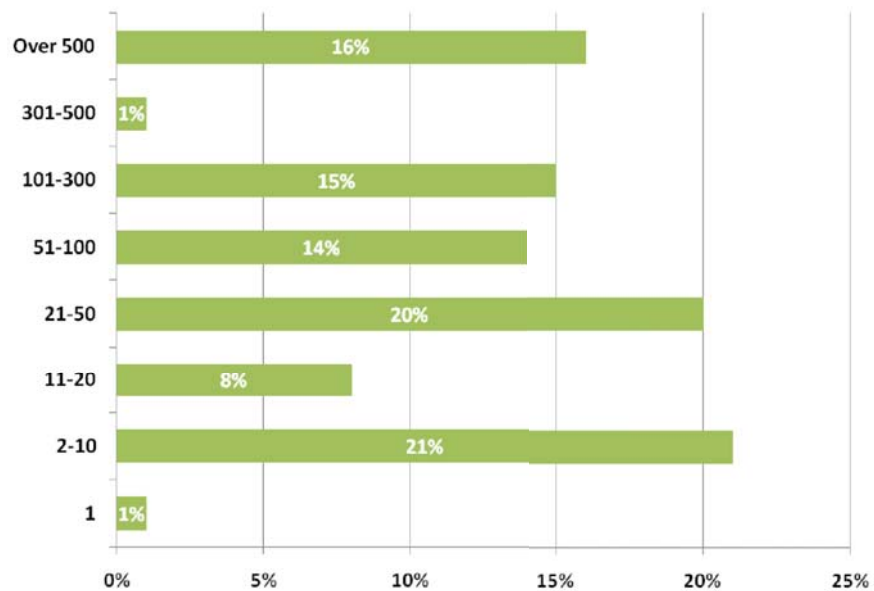


¹ Cramer's V is a measure of the relationship between two variables and is appropriate to use when one or both of the variables are at the nominal level of measurement. Cramer's V ranges from 0 to +1 and indicates the strength of a relationship. The closer to +1, the stronger the relationship between the two variables. The accompanying "p" scores presented in this report for Cramer's V indicate the level of statistical significance.

Of the truck companies that responded, 70% were for-hire carriers, 16% were private carriers, and just 13% were owner-operator/independent carriers. For the truck drivers who responded, 38% drove for for-hire carriers, 12% for private carriers, and 46% were owner-operator/independent carriers.

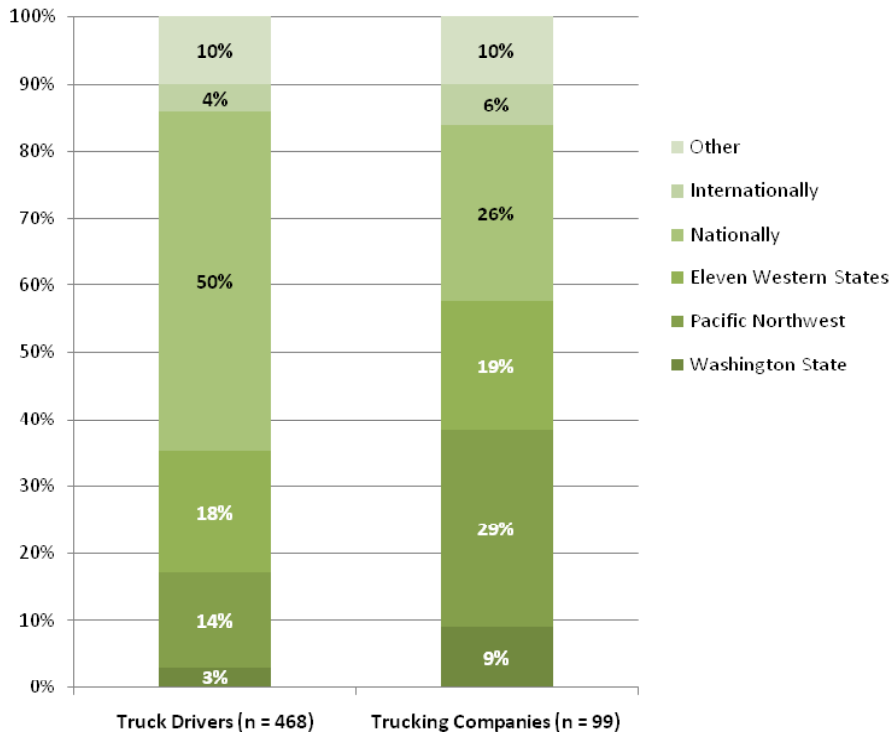
About half (51%) of the trucking companies are based in Washington, while the other half (49%) are not based in Washington. To understand the size of the trucking companies, we asked them to provide the number of truck drivers they employed. Half of the trucking companies reported that they had 50 or fewer drivers. The number of drivers employed for the trucking companies who responded to the survey is shown in Figure 2.

Figure 2 - Number of Drivers Employed by Trucking Companies



Truck drivers who responded to the driver survey tended to drive nationally more than the trucking companies who responded to the company survey. Those truck companies who responded tended to drive more in Washington and the Pacific Northwest than nationally. Figure 3 summarizes where truck drivers and trucking companies are primarily driving their trucks. It's important to note that truck drivers are responding for the individual truck they drive, while trucking companies are responding for their company's trucks as a whole.

Figure 3 - Where Truck Drivers and Trucking Companies Primarily Drive Their Trucks



To get a measure of how much truck drivers drive in Washington, we asked them the number of days per year they typically drive in Washington. Fifty-eight percent of truck drivers responded that they drive in Washington 50 days or less each year, while 17% are driving 200 or more days in Washington year. Truck driver responses are shown in Table 1.

Table 1 –Number of Days Each Year Driven in Washington State by Truck Drivers

Number of Days	Truck Drivers (n = 464)
0	5%
1-25	36%
26-50	17%
51-100	13%
101-200	13%
201-300	9%
More than 300	8%

To understand how much trucking companies were driving in Washington, we asked them to provide the average number of one-way trips their trucks took each week in Washington. Fifty-one percent responded that they average 50 or less one-way trips in Washington each week, while 31% responded they average more than 200 one-way trips per week. Trucking companies responses are summarized in Table 2.

Table 2 – Average Number of One-Way Trips per Week Made by Trucking Companies in Washington

Average Number of One-Way Trips Per Week	Trucking Companies n = 96
0	5%
1-25	32%
26-50	14%
51-100	6%
101-200	12%
201-300	8%
More than 300	23%

WSDOT was also interested in the types of trucks primarily driven in Washington State as different trucks have different parking needs. Both the truck drivers and the trucking companies indicated that the most prevalent types of truck they drive or operate in Washington State were: dry vans, refrigerated trucks, and flatbed trucks. To a lesser degree, oversized trucks, container trucks, tankers, bulk load trucks, and logging trucks are driven in Washington State.

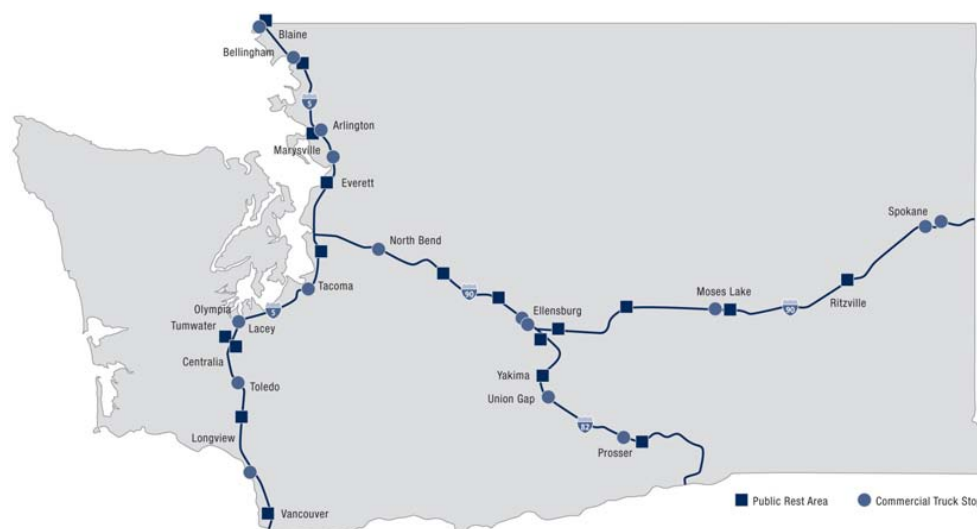
Table 3 –Types of Trucks Primarily Driven in Washington State (Percents will add up to more than 100% as multiple choices were allowed)

	Truck Drivers n = 466	Trucking Companies n = 99
Dry Van	46%	48%
Flatbed	30%	40%
Refrigerated	28%	42%
Container	6%	21%
Tanker – Liquid	4%	12%
Tanker – Dry	1%	2%
Oversize	11%	9%
Bulk	3%	4%
Moving Van	1%	2%
Logging	1%	1%
Other	9%	13%

Results

Public and Commercial Truck Parking and Amenities are Important and Well Used

Available truck parking along I-90, I-5, and I-82 is primarily found at public rest areas and commercial truck stops. Along these routes there are 16 public rest areas. Commercial truck stops are located near 14 different population centers and at many of these population centers, more than one commercial truck stop is available.



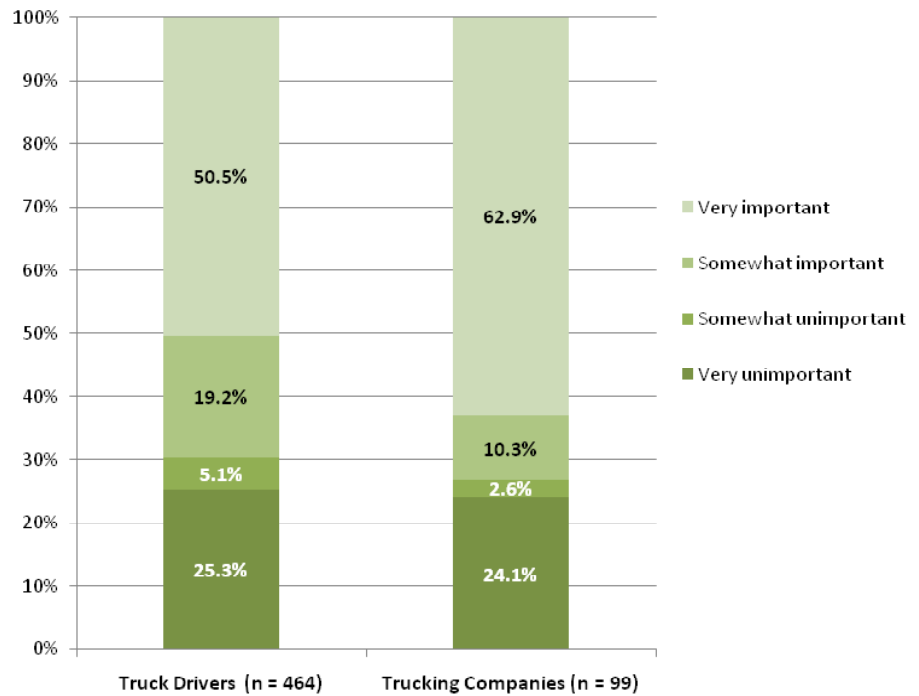
Map 1 – Locations of Public Rest Areas and Commercial Truck Stops Along I-90, I-5, and I-82 in Washington State

2 Cramer's V = .176, p = .000

3 Cramer's V = .291, p = .044

The availability of truck parking is viewed as important to both the truck drivers and the trucking companies, especially for those truck drivers who drive primarily in WA State and those truck companies that operate primarily in WA State. In response to the surveys, 62.9% of truck drivers and 50.5% of trucking companies stated that truck parking along I-5, I-90, and I-82 was very important to them. Figure 4 shows the importance of truck parking to truck drivers and trucking companies.

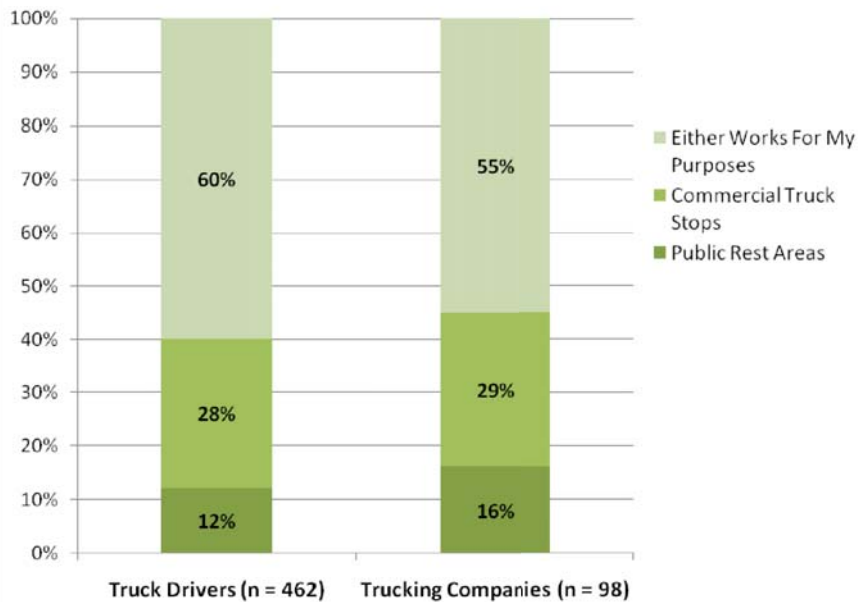
Figure 4 - Importance of Truck Parking Along I-5, I-90, and I-82



When asked which they preferred for truck parking, the majority of truck drivers (60%) and trucking companies (55%) indicated that either a public rest area, or a commercial truck stop suited their purposes for truck parking. Not surprisingly, the longer the truckers park, the more they prefer commercial truck stops.⁴ Figure 5 shows truck parking preferences for truck drivers and trucking companies who responded to the survey.

⁴ Cramer's V = .142, p = .018

Figure 5 - Truck Parking Preferences of Truck Drivers and Trucking Companies



According to truck drivers, they typically park at public rest areas and commercial truck stops in the evening (56%), and overnight (79%) hours. The average length of stay at these stops is 6 to 10 hours for 23% of drivers, while 59% reported they are stopping for their 10-hour rest period.

When truck drivers in Washington stop for their 10-hour rest period, they reported that the majority of the time (56%) they stay at a commercial truck stop, while 16% stay at a public rest area and 22% stay somewhere else. Most of those who park somewhere else reported that they either parked at home, parked on the roadside, or at a private yard controlled by their trucking company.

Trucking companies reported similar results for their drivers. They responded that their trucks typically park at public rest areas and commercial truck stops in the evening (67%), and overnight (64%) hours. The average length of stay at these stops is 6 to 10 hours for 18% of their drivers, while 48% of their drivers are stopping for their 10-hour rest period. Similar to the drivers' responses, trucking companies stated that much of the time their trucks spend their 10-hour rest periods at commercial truck stops (44%). Thirty-seven percent of the trucking companies also responded that they own or have access to private truck parking areas in Washington, which may explain why less trucking companies thought their drivers were using commercial truck stops for their 10-hour rest periods than was reported by the trucking companies.

Table 4 – Where Truck Drivers Park for Their 10-Hour Mandatory Stops

	Truck Drivers n = 458	Trucking Companies n = 99
Public Rest Area	16%	14%
Commercial Truck Stop	56%	44%
Private Truck Parking Areas	n/a	7%
Other	22%	21%
Doesn't Apply	6%	9%
Don't Know	n/a	4%

Note: We didn't ask truck drivers if they parked in private truck parking areas, but in their responses to Other – most indicated that is where they were parking if they were not parking at a public rest area, or commercial truck stop.

WSDOT was also interested in learning more about which specific commercial truck stops and public rest areas were being used by the truck drivers. For each commercial truck stop and public rest area along I-90, I-5, and I-82, the questionnaire asked which they used for staging and/or waiting, short to medium term parking (>1 hour to < 10 hours), and for their 10 hour rest periods. The results indicate that all truck parking areas were used for all these purposes. However, truck drivers were more likely to use commercial truck stops for their 10-hour rest periods, and to use the public rest areas for short to medium term parking.

Truck drivers also use many of the amenities available at commercial truck stops. This is likely why they use commercial stops more frequently for their 10-hour rest periods. Truck drivers indicated that the most popular amenities were the rest rooms (94%), truck parking (93%), fueling services (93%), restaurant (87%), showers (86%), and stores (7%). Table 5 shows which amenities truck drivers currently use at commercial truck stops.

Table 5 – Amenities Currently Used at Commercial Truck Stops by Truck Drivers (Totals More Than 100% as Drivers Were Asked to Pick All Amenities Used)

	Percent Used by Drivers
Rest Rooms	94%
Truck Parking	93%
Fuel	93%
Restaurant	87%
Showers	86%
Store	77%
Maintenance Services	47%
Laundry Room	39%
Wi-Fi	33%
Electrification/Shore Power/Plug-In	15%
Vending Machines	13%
Exercise Room	5%
Other	2%

Truck drivers also currently use all the available public rest areas along I-5, I-90, and I-82 for staging and/or waiting, short to medium term parking (>1 hour to < 10 hours), and for their 10 hour rest periods. In general, public rest areas are used less for 10 hour rest periods than are commercial truck stops. Drivers also use the amenities provided at the public rest areas. They indicated that they currently use the rest rooms (96%), the separate truck parking (83%), and the vending machines (31%).

Truck Parking is Unavailable, Overcrowded, and Too Far Apart

To help determine the availability of truck parking, we asked truck drivers and truck companies how often their drivers parked in areas other than public rest areas and commercial truck stops. Only 17% of truck drivers said they never did this, but 56% percent of drivers said they parked in other areas less than 50% of the time, and more than a quarter said they parked in other areas more than 50% of the time. It's interesting to note that trucking companies think their trucks park outside of public rest areas and commercial truck stops somewhat less than reported by the truck drivers. Truck companies responded that 9%

of their trucks never do this, 65% do this less than 50% of the time, and 24% do this more than 50% of the time.

Truck drivers also indicated that the major barrier to using existing truck parking is overcrowding. Ninety-five percent reported this as the major barrier. The other major barrier reported is location: either too far apart (46%), or in the wrong place (44%). Eighty-eight percent of the trucking companies also responded that the major barrier to their trucks using existing truck parking along I-5, I-90, and I-82 was overcrowding. The other major barrier was location, with 41% saying they were too far apart, and 36% saying there were in the wrong places. Table 6 summarizes the major barriers to parking as reported by truck drivers and trucking companies.

Table 6 – Major Barriers to Using Existing Truck Parking on I-90, I-5, or I-82 (Totals more than 100% as more than one response was allowed)

	Truck Drivers n = 424	Trucking Companies n = 93
Overcrowded	95%	88%
Located Too Far Apart	46%	41%
Located in the Wrong Areas	44%	36%
Not Secure	31%	29%
Don't Have the Services I Need	23%	17%
Hard to Access From the Freeway	20%	17%
Other	10%	16%

In addition, the majority of additional comments we received from the truck drivers and trucking companies were focused on the lack of truck parking along I-90, I-5, I-82, and throughout the state. The biggest complaint was RVs and other personal vehicles parking in the truck parking areas of the public rest areas.

WSDOT was also interested in where truck drivers stop to chain up their trucks. Of the 442 truck drivers who responded to that question, 80% of them stated that they typically stopped on the roadside to chain up their truck. Twenty percent responded to the category “other” and almost all the comments from these truck drivers were that they did not chain up, but parked their truck to wait it out. Of the remaining truck drivers who responded to this question, 10% typically chain up at public rest areas, and 7% typically chain up at commercial truck stops.

Oversize Trucks Have Special Parking Needs

Driving an oversize truck creates its own parking challenges. We received many comments from drivers of oversize trucks about the lack of truck parking that was large enough to accommodate the size of their trucks. Specific questions on oversize truck parking needs were included to understand their special needs as new and improved truck parking is considered.

Of the 473 truck drivers who responded to the truck driver survey, 82 responded that they drove an oversize truck. In terms of the size of parking space they required, the majority responded that a space that was between 76 and 100 feet long, 12 and 16 feet wide, and 14 feet high would meet their needs. A few drivers indicated they would need a longer, or wider, or higher space, but the majority would be satisfied with the dimensions described above.

For trucking companies, of the 99 trucking companies that responded to the trucking company survey, 34 responded that they operated some oversize trucks in Washington State. Two-thirds (65%) of these companies reported that 20% or less of their company's trucks were oversize. Just as the truck drivers responded, the majority of trucking companies require a parking space that is between 76 and 100 feet long and 14 feet high for their oversize trucks. Unlike the truck drivers, over two-thirds (71%) of trucking companies require just 11 feet for parking space width.

Use of Idling Reduction Equipment is Limited

WSDOT was also interested in learning more about the use of idle reduction equipment by trucks drivers and trucking companies operating in Washington State. Only 23% of the truck drivers responded that they drive a truck which allows them to plug into shore power. Those truck drivers who travel primarily in the 11 western states, or nationally, or internationally, were more likely to have shore power cable trucks.⁵ Also, those truckers who spend longer periods of time at their stops are more likely to have shore power cable trucks.⁶ Finally, oversized rigs are also more likely to have shore power cables.⁷

On the other hand, 31% of the trucking companies indicated that they have at least some trucks with this capability. In addition, 38% of drivers and 40% of trucking companies indicated they do not use any type of idle reduction. For those that do use idle reduction, the most common methods were the use of an auxiliary power unit or generator, or computer controls to limit idle duration. Table 7 shows which methods drivers and companies currently use for idle reduction.

5 Cramer's V = .178, p = .014

6 Cramer's V = .160, p = .021

7 Cramer's V = .194, p = .000

Table 7 –Idle Reduction Equipment or Methods is in Limited Use

	Truck Drivers n = 460	Trucking Companies n = 95
Do Not Use	38%	40%
Auxiliary Power Unit (APU) or Generator	32%	32%
Computer Controls to Limit Duration of Idle	15%	26%
Truck Stop Electrification (Shore Power)	14%	13%
Other	9%	8%
APU or Generator With Shore Power Capability	10%	5%
Battery Based Auxiliary With Power System	5%	7%
Battery Based System With Shore Power Capability	3%	4%

When asked what the biggest barrier was to using idle reduction equipment or methods, 39% of the drivers and 30% of trucking companies responded that they have no barriers because they were already using some type of idle reduction or methods. For those that reported barriers to using idle reduction equipment and methods, truck drivers (41%) and trucking companies (56%) stated that the biggest barrier was the cost of the equipment. This is especially the case among drivers who work for owner-operated or independent companies.⁸

Table 8 – Cost is Biggest Barrier to Using Idle Reduction Equipment or Methods

	Truck Drivers n = 457	Trucking Companies n = 95
No Barrier, Already Use Idle Reduction	39%	30%
Cost of Equipment – APU, Battery Packs, Shore Power	41%	56%
Reliability of Equipment	3%	2%
Cost of Truck Stop Electrification Service	3%	0%
Availability of Truck Stop Electrification Service	5%	6%
Other	9%	6%

Although only 39% of truck drivers and 30% of trucking companies responded that they use some type of idle reduction, over two-thirds of all the respondents to both surveys - 71% of drivers, and 72% of companies - responded that the main reason to reduce idling would be to save money on fuel, especially among truck companies that make more trips per year in WA State.⁹ It appears that while respondents understand that using these methods would save money on fuel, they are unwilling to invest in the equipment to realize these savings.

⁸ Cramer's V = .175, p = .000

⁹ Cramer's V = .351, p = .003

Where Are New Truck Parking Locations and Services Needed?

To understand where it makes sense to develop new truck parking areas, or increase available truck parking, WSDOT wanted to know which locations the truck drivers and trucking companies that depend on truck parking would choose. Truck drivers and trucking companies were presented with a list of all major population centers along I-5, I-90, and I-82 and asked to pick their top three choices for where additional truck parking should be made available. The drivers and companies were fairly consistent in choosing the same three locations - Seattle, Tacoma, and Federal Way. In fact, the top 10 choices are the same for both the truck drivers and the trucking companies, but in slightly different order. Table 9 shows the top 20 choices for both the truck drivers and the trucking companies.

Table 9 - Top Twenty Preferences for New/Expanded Truck Parking Locations

Locations	Truck Drivers <i>n</i> = 416	Locations	Trucking Companies <i>n</i> = 86
Seattle	52%	Seattle	50%
Tacoma	45%	Tacoma	38%
Federal Way	27%	Federal Way	27%
North Bend	19%	Snoqualmie Pass	17%
Spokane	19%	Vancouver	16%
Vancouver	17%	Spokane	13%
Olympia	16%	Olympia	11%
Snoqualmie Pass	16%	North Bend	11%
Yakima	10%	Yakima	9%
Ellensburg	9%	Ellensburg	8%
Everett	8%	Bellevue	7%
Chehalis/Centralia	5%	Bellingham	7%
Moses Lake	5%	Chehalis/Centralia	7%
Bellingham	4%	Longview/Kelso	7%
Cle Elum	4%	Blaine	6%
Longview/Kelso	4%	Toledo	6%
Bellevue	3%	Moses Lake	6%
Union Gap	3%	Cle Elum	6%
Richland	3%	Marysville	6%
Mount Vernon	3%	Everett	5%

It is also important to understand how far truck drivers are willing to drive to use a new or enhanced truck parking area. While a small percentage of truck drivers (7%) and trucking companies (6%) would only be willing to use new or enhanced truck parking if it was directly accessible from the Interstate (especially truck drivers who drive primarily in WA State¹⁰), 53% of truck drivers would be willing to drive up to one mile, with a quarter of those drivers willing to drive up to 2 miles, and another quarter willing to drive up to 3 miles to use new or enhanced truck parking. Figure 6 and 7 show the distances truck drivers and trucking companies stated they would be willing to drive to use a new truck area.

Figure 6: How Far Would You Drive to Use New Truck Parking by Truck Drivers (n = 462)

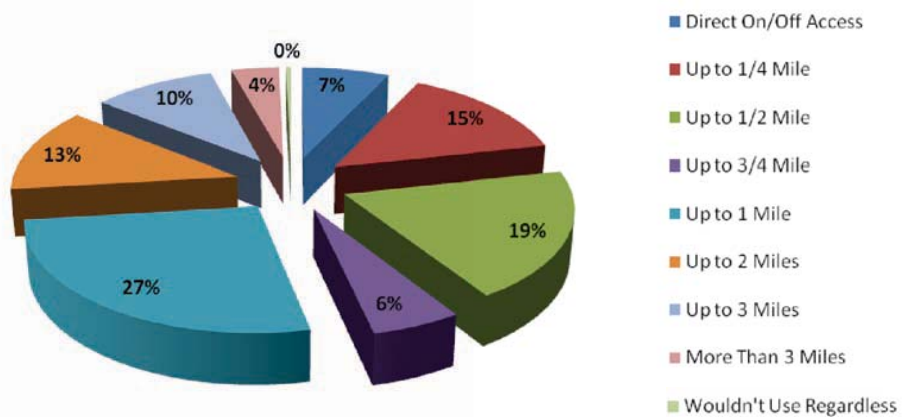
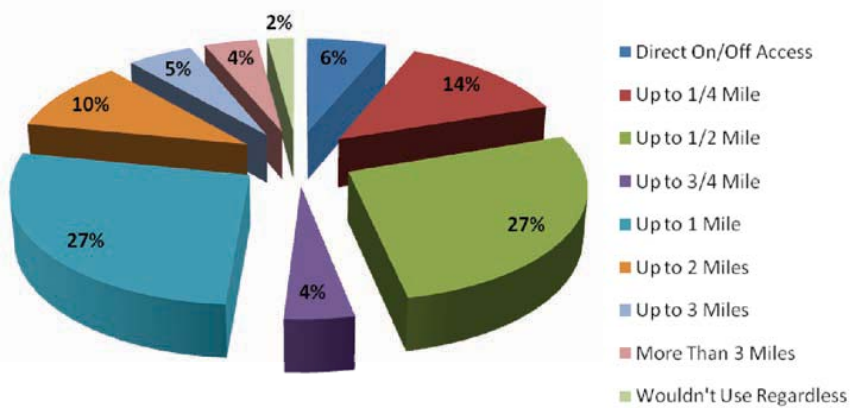


Figure 8: How Far Would You Drive to Use New Truck Parking by Trucking Companies (n = 96)



¹⁰ Cramer's V = .160, p = .028

In addition to the need for truck parking along I-90, I-5, and I-82, WSDOT is also aware of the need for new and/or enhanced truck parking along SR-167 and at the Ports of Seattle and Tacoma. In order to prioritize its efforts, WSDOT asked about the importance of truck parking in these areas. A majority of truck drivers (56%) responded that it was either somewhat important (20%), or very important (36%) for them to have parking in these areas, while only 43% of trucking companies responded that it was either somewhat important (21%), or very important (22%) to have parking in these areas. Both the truck drivers (79%) and the trucking companies (71%) did respond that it was more important to have new or enhanced truck parking along I-5, I-90, and I-82, than along SR 167 and at the Ports of Seattle and Tacoma. However, the more days a truck driver drove in WA State, and companies who are based in WA State, were more supportive of enhanced or new truck parking and services along SR 167 and at the Ports.

Interest in Amenities at New Truck Parking Areas is Strong

One of WSDOT's purposes in conducting these online surveys of truck drivers and trucking companies was to determine what types of amenities they would likely use at a new and/or improved truck parking area. This information will be used as WSDOT moves forward in efforts to improve truck parking along I-90, I-5, and I-82. From the survey results, it is clear that truck drivers use both public rest areas and commercial truck stops, but they tend to use them for different purposes. They prefer to stop at commercial truck stops for their 10-hour rest periods because of the variety of amenities available, but use both public rest areas and commercial truck stops for short and long term truck parking needs.

Truck drivers top five choices for amenities at a new or enhanced parking area include: easy access to the Interstate (97%) rest rooms (96%), paved lot (96%), separate truck parking (96%), and lighting (96%). Trucking companies top five choices were almost identical, listing: lighting (92%), rest rooms (92%), paved lot (91%), easy access to the Interstate (91%), and separate truck parking (90%). Figures 8 and 9 show the percentage of truck drivers and trucking companies that would be somewhat or very likely to use each listed amenity at a new or expanded truck parking area.

¹¹ Cramer's V = .197, p = .009

¹² Cramer's V = .348, p = .05

Figure 8 - Amenities Truck Drivers Would Likely Use at Commercial Truck Stops

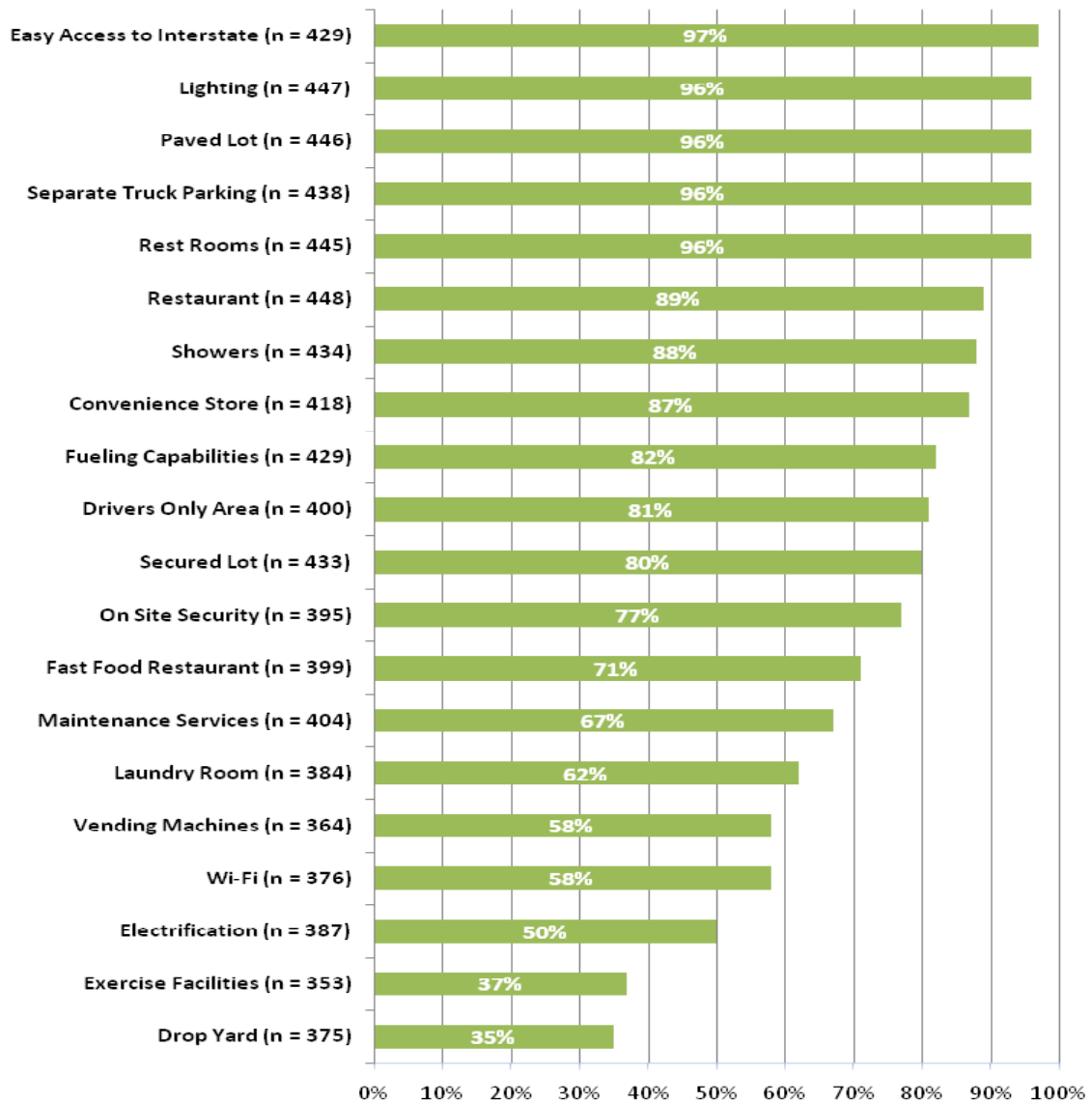
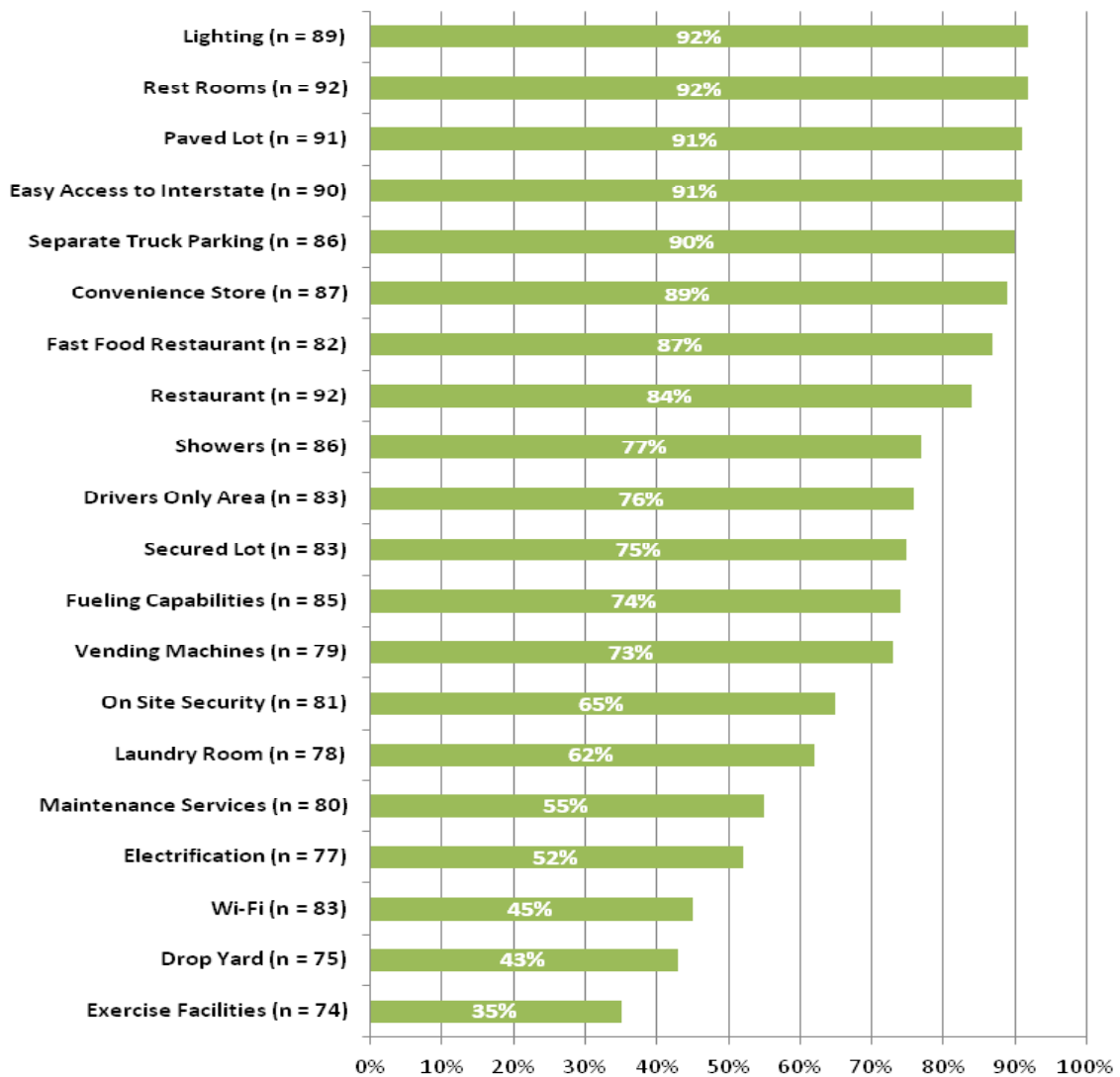


Figure 9 - Amenities Trucking Companies Think Their Drivers Would Likely Use at Commercial Truck Stops



Truck Drivers and Trucking Companies Are Not Willing to Pay for Truck Parking

WSDOT was curious as to whether truck drivers and trucking companies might be willing to use a phone reservation system to find and reserve available truck parking, and whether they might be willing to pay for truck parking. In regards to a reservation system, truck drivers appear to be more unlikely (55%) than likely (39%) to use an online or call-in reservation system to find available parking and reserve it. The more often truck drivers park in areas other than public rest areas or commercial truck stops, the more willing they were to use a reservation system. Trucking companies are even more unlikely (66%) than likely (28%) to have their drivers use an online or call-in reservation system for truck parking.

It was also very clear that truck drivers and trucking companies are not willing to pay for truck parking during their 10-hour rest periods. For truck drivers, around two-thirds (69%) would not pay anything, while 26% would pay between \$1 and \$9, and 5% would pay between \$10 and \$19. The responses from trucking companies on how much they would be willing to pay to park their trucks were very similar with 71% not willing to pay, 20% willing to pay between \$1 and \$9, and 7% willing to pay between \$10 and \$19. Even if they were able to reserve a parking space in advance, truck drivers (64%) and truck companies (64%) are equally unwilling to pay for truck parking. However, given that truck parking is now free, prospective willingness to pay is difficult to assess within this survey.

	Truck Drivers – Pay for 10-Hour Parking	Truck Drivers – Pay for Reserved Parking	Trucking Companies – Pay for 10-Hour Parking	Trucking Companies – Pay for Reserved Parking
Wouldn't Pay	69%	64%	71%	64%
\$1 - \$9	26%	27%	20%	28%
\$10 - \$19	5%	7%	7%	7%
\$20 - \$29	0%	<1%	0%	0%
\$30 - \$39	<1%	<1%	0%	0%
\$40 - \$49	0%	0%	0%	0%
\$50 or more	0%	0%	1%	1%

13 Cramer's V = .133, p = .03

Truck drivers and trucking companies were a little more willing to pay a per day fee to drop a trailer in a secure drop zone. Although 59% of truck drivers were not willing to pay for this service, 27% were willing to pay between \$1 and \$9, with 10% willing to pay between \$10 and \$19, and just 3% were willing to pay \$20 to \$29. Similarly, 55% of truck companies were not willing to pay for this service, but 33% were willing to pay \$1-\$9, 7% were willing to pay \$10-19, and just 3% were willing to pay \$20-\$29. A few trucking companies were willing to pay \$50 or more for this service.

The comments submitted by truck drivers and trucking companies with the online surveys help explain this unwillingness to pay for truck parking. There were numerous references to the amount of money that trucks pay in taxes and how those funds should be sufficient to provide adequate truck parking facilities. Finally, the interpretation of willingness to pay for parking must be considered in the context that the service is now free and all else being equal truckers would like to keep it that way. Responses to willingness to pay for a Drop Yard are likely more accurate.

Summary of Truck Driver and Trucking Company Comments

- We received extensive comments from both the truck drivers and the trucking companies who responded to the online surveys. The following summary includes the most prevalent comments.
- Truck drivers and trucking companies do not want to pay for parking. They believe they already pay enough with all the taxes they pay.
- There is not enough truck parking available in Washington. This is especially true in the Seattle/Tacoma metropolitan areas.
- Truck drivers are frustrated by having to follow the hours-of-service requirements, and then not having adequate parking to stop when they are required to stop to rest.
- RVs and other personal vehicles take up truck parking space at the public rest areas that should be available for truck parking.
- WSDOT should create new truck parking by expanding existing truck parking, making truck only parking available and working with private companies in industrial areas to make parking available overnight. There is also a need to expand the chaining areas on both west and east sides of Snoqualmie Pass.

- Some of the existing truck parking is difficult to use due to its design: it is not long or wide enough. This is especially true for over-size trucks.

Comments from the Washington State Patrol's Commercial Vehicle Division

PRR interviewed three officials from the Washington State Patrol's Commercial Vehicle Division (CVD) to learn more about their responsibilities and to obtain their views in regards to truck parking in Washington State. Each of the officials we talked to were responsible for different geographic areas of the state. The Division is responsible for truck weigh stations; enforcing truck size; weight and load laws; conducting truck safety inspections; reviewing driver logs; and handling illegally parked trucks and truck trailers. The Patrol does not patrol or enter private facilities, such as commercial truck stops unless they are called in for some reason. Local law enforcement officials typically will handle anything that happens on private property. The Patrol's CVD officers inspect weight, log and trucks primarily at the weigh stations. The Patrol's CVD officers do not patrol public rest areas. Troopers do some patrolling of the public rest areas, but they only ticket trucks and drivers with obvious violations.

All the officials we talked with stated that the biggest issue they have with truck parking is that there is not enough truck parking available. They explained that trucks routinely park illegally on freeway on-ramps and off-ramps, along the road, and at the weigh stations. They also explained how this presents a host of problems including safety and collision risks to the truck and to other drivers, as well as sanitation issues since there are no restroom or garbage facilities available alongside the road. At the same time, these officials noted that many truck drivers do not plan out their rest stops, and tend to stop and park when they reach the end of their service hours, even if they are within a few miles of a truck parking area.

The three interviewed officials explained that it would be easy to improve truck parking at the public rest areas just by changing the signage that currently limits stays to eight hours by expanding it to ten hours to allow them to legally stay for their entire 10-hour rest period. It would also help alleviate the truck parking shortage by prohibiting personal cars and RVs from using the public truck parking area. In terms of adding truck parking capacity, all three officials thought it made sense to look at all the public rest areas to determine which ones might have the capacity to be increased in size.

Locations where the Patrol's CVD officers think it would be helpful to develop additional truck parking include: Seattle/Tacoma, Vancouver, just north of Marysville, Cle Elum, and between Yakima and Ellensburg. In addition, it was suggested that additional parking could be developed at the chaining areas on both sides of Snoqualmie Pass. This would improve safety during chaining season, and provide additional truck parking throughout the year. It was further suggested that a truck parking area could be added to the Nisqually Weigh Station that sits adjacent to Fort Lewis by gaining access to property on Fort Lewis for this purpose.

Officials thought it was important to have restroom and garbage facilities at these truck parking facilities to reduce the sanitation issues they see with roadside parking. They also explained that they find Porta-Potties to be ineffective and suggested WSDOT construct some type of permanent restroom at these sites, with one official suggesting that they be open to use by the public.

The Patrol's CVD officials also stated that it makes sense for WSDOT to try to attract private companies to develop additional commercial truck stops in the state, along with looking for opportunities to develop and expand public truck parking areas as truck drivers use these two types of areas for different length of parking purposes.

Conclusions and Recommendations

This research project was structured to provide information useful to a future market feasibility study for improved truck parking in Washington State. The need for improved truck parking along Washington State interstates was strongly validated by the 473 truck drivers, and 99 trucking companies that participated in this survey. Existing parking areas are overcrowded and too far apart, with fully 95% of truck drivers saying overcrowding is a major barrier to their use.

Not surprisingly, at least a quarter of all truckers park in areas other than designated public or private parking areas more than half the time. Over 80% park in non-designated areas at least some of the time. Truck drivers park on freeway on- and off-ramps creating safety hazards, stay longer than permitted at public rest areas, and park at weigh stations. WSP officials tell us truck drivers basically park wherever they can. The lack of sufficient parking places, particularly for mandatory 10-hour rest periods, appears to be a major issue for truck drivers and trucking companies in Washington State.

Both truck drivers and trucking companies agree that the highest priority locations for new or expanded truck parking is along the I-5 corridor within the Seattle, Tacoma, and Federal Way areas, in that order. Fourth in priority is the need for improved and expanded truck parking facilities at the chain-up locations on both sides of Snoqualmie Pass.

The demand for new truck parking is very strong, and it is most needed in the most congested and built up urban regions of the State. However, only 54% of surveyed truck drivers are willing to drive one mile off the highway to a truck parking area, while 80% would drive up to ½ mile. To make matters worse, only a third of truckers say they are willing to pay between \$1 and \$9 for overnight parking-though free parking today may affect trucker and truck company response to the prospect of paying for a service that is now free.

Conversely, a majority of truckers and trucking companies indicate a high likelihood to use a variety of services that necessarily have a cost—from maintenance facilities, restaurant, vending, showers, to laundry and more. In this sense the economic model of providing more truck parking may not have to rely upon parking fees alone.

More broadly, survey results provide key data necessary to discuss how and where to expand truck parking with public and private partners. PRR recommends that WSDOT use this information to assess the interest and requirements for private truck parking concessionaires to partner with WSDOT in meeting this crucial public need. The strong interest, and number of truck driver and truck company respondents, suggests that many would likely provide further information if requested.

More specifically, PRR recommends:

- Consideration be given to extending the 8-hour parking limitation at public rest areas to 10-hours.
- Allocation of parking within public rest areas be reviewed to maximize use and reduce conflicts with RVs.
- Survey findings be packaged and presented to private commercial truck stop developers to assess their interest in partnering to improve truck parking needs.
- Assessing the mix of amenities required to support a private commercial truck parking operation.
- Assessing local jurisdiction willingness to assist in providing space and services within target expansion areas.
- Using the findings from meeting with private commercial truck stop developers to assess land owner interest in key target areas.
- Assessing short- and long-term improvements to expand chain-up areas on both sides of Snoqualmie Pass.
- Considering options to provide smaller, but more numerous overnight truck parking areas in target areas, such as by partnering with industrial property owners.

Particular preferences associated with amenities and other survey findings will be useful to WSDOT when it is ready to test a particular location to expand or create new parking. Research results may be manipulated to provide various cross tabulations for purposes of refining the market feasibility of truck parking within specific regions, or for specific purposes.

Appendix A – Truck Driver Survey Questions

Driver Survey

The Washington State Department of Transportation is looking for suggestions on how to improve truck parking services along I-5, I-90 and I-82. We need to better understand your truck parking and services needs to develop proposed improvements for the State Legislature. As a truck driver your help in completing this survey by March 15th is greatly appreciated.

The survey will only take about 12 minutes of your time and your answers are completely anonymous. To best view the survey you should maximize your computer screen. Complete the survey by simply clicking and typing as appropriate. Depending on your answer to certain questions you may be skipped over some questions. Please do not go back and answer those skipped questions. Be sure to click “Submit form” at the end of the survey so that your answers will be included.

If you have any questions about the purpose of this survey, please contact Dale Talbot from WSDOT at (360) 750-6990. If you have any problems completing the survey, please contact Bruce Brown at research@prrbiz.com.

About Your Truck Driving and Parking

1.1. Please indicate the type of carrier you currently work for:

- For-hire carrier
- Private carrier
- Owner-operator/Independent
- Other (please specify)

- 1.2. In which area do you primarily drive?
- Washington State
 - Pacific Northwest (Washington, Idaho, Oregon)
 - The Eleven Western States
 - Nationally
 - Internationally
 - Other (please specify)
- 1.3. Please indicate the type of trucks you use in Washington State:
(check all that apply)
- Dry van
 - Flatbed
 - Refrigerated
 - Container
 - Bulk
 - Tanker - dry
 - Tanker - liquid
 - Moving van
 - Logging
 - Oversize
 - Other (please specify)
- 1.4. Do you typically carry a truckload, less than a truckload, or a combination?
- Truckload
 - Less than a truckload
 - Both truckload and less than a truckload in about equal amounts
 - Other (please specify)
- 1.5. About how many days per year do you typically drive in Washington State?
- 1.6. How important is it for you to have truck parking along I-5, I-90, and/or I-82 in Washington State?

- 1.7. Overall, do you prefer public rest areas or commercial truck stops or truck parking in Washington State?
- Public rest areas
 - Commercial truck stops
 - Either works for my purposes
- 1.8. Approximately how often do you park in areas other than public rest areas or commercial truck stops (for example, ramps, side streets, and/or weigh stations)?
- 1.9. At what time of day do you typically use public rest areas or commercial truck stops? (check all that apply)
- Don't use
 - Morning
 - Afternoon
 - Evening
 - Overnight
- 1.10. What is your average length of stay at these stops?
- 1.11. When you drive in Washington State, where do you spend the majority of your 10-hour mandatory rest periods?
- Public rest area
 - Commercial truck stop
 - Other (please specify)
 - Doesn't apply
- 1.12. Do you drive an oversize rig?
- Yes
 - No
- 1.13. What size parking space do you typically require?
- 1.14. What width of parking space do you typically require?
- 1.15. What height clearance do you typically require?

- 1.16. What type of parking space is acceptable to you? (check all that apply)
- Pull-through space
 - Back-in space
- 1.17. What are the major barriers you now face using existing truck parking on I-5, I-90 or I-82? (check all that apply)
- Overcrowded
 - Located too far apart
 - Located in the wrong areas
 - Hard to access from the highway
 - Don't have the services I need
 - Not secure
 - Other (please specify)
- 1.18. Do you have a shore power cable truck (can plug into shore power and operate HVAC and other onboard equipment, either OEM or after market)?
- Yes
 - No
- 1.19. Do you use any of the following idle reduction equipment or methods? (check all that apply)
- Do not use any idle reduction equipment or methods
 - Computer controls on engine that limit the duration of idle
 - Auxiliary power unit (APU) or generator
 - APU or generator with shore power capability
 - Battery based auxiliary power system
 - Battery based system with shore power capability
 - Truck stop electrification (including shore power) where available
 - Other (please specify)
- 1.20. What is your main reason for reducing idling?
- Save money on fuel
 - Reduce engine maintenance cost
 - Health reasons
 - Improve the environment
 - Reduce dependence on foreign oil
 - Reduce noise and vibration
 - Other (please specify)

1.21. What is your biggest barrier to using idle reduction equipment or methods?

- No barrier, already use some type of idle reduction
- Cost of onboard equipment such as APU's, battery packs and shore power
- Reliability of equipment
- Cost of truck stop electrification service
- Availability of truck stop electrification service
- Other (briefly describe)

Use of Commercial Truck Stops

2.1. For COMMERCIAL TRUCK STOPS, please indicate which locations you use for staging and/or waiting for destination appointments, short to medium term parking, or mandatory 10-hour rest periods. (check all that apply)

	Staging and/or waiting	Short to medium term parking (<1hr. to <10 hrs.)	10 hr. rest period
Vancouver/Longview			
Toledo/Centralia			
Tumwater/Olympia/Lacey			
Tacoma			
Everett/Marysville			
Arlington			
Bellingham/Blaine			
North Bend			
Ellensburg			
Moses Lake			
Ritzville			
Spokane			
Union Gap/Yakima			
Prosser			

2.2. Where do you typically stop to chain up your truck? (check all that apply)

- Commercial truck stop
- Public rest area
- Roadside
- Other (please specify)

2.3. For COMMERCIAL truck stops, please indicate which amenities you currently use. (check all that apply)

- Fuel
- Restaurant
- Store
- Rest rooms
- Showers
- Electrification/Shore Power/Plug-in
- Laundry room
- Maintenance services
- Vending machines
- Exercise room
- Wi-Fi
- Truck parking
- Other (please specify)

Use of Public Rest Areas

3.1. For PUBLIC REST AREAS, please indicate which locations you use for staging and/or waiting for destination appointments, short to medium term parking, or mandatory 10-hour rest periods. (check all that apply)

	Staging and/or waiting	Short to medium term parking (<1hr. to <10 hrs.)	10 hr. rest period
Gee Creek, Ridgefield			
Toutle River, Castle Rock			
Scatter Creek, Tumwater			
Maytown, Tumwater			
Sea Tac, Sea Tac			
Silver Lake, Everett			
Smokey Point, Arlington			
Bow Hill, Burlington			
Custer, Ferndale			
Price Creek, Snoqualmie			
Indian John Hill, Cle Elum			
Rye Grass, Ellensburg			
Winchester, George			
Schrag, Moses Lake			
Sprague Lake, Sprague			
Scenic View, Kennewick			
Selah Creek, Selah			
Prosser, Prosser			

3.2. For PUBLIC REST AREAS, please indicate which amenities you typically use. (check all that apply)

- Rest rooms
- Vending machines
- Separate truck parking
- Other (please specify)

Additional Truck Parking

4.1. WSDOT will be recommending several locations for enhanced or new truck parking and services along I-5, I-90, and I-82. Please indicate the TOP 3 geographic areas in which you would like new or additional truck parking and services.

- | | |
|----------------------|-------------------|
| • Vancouver | • Woodland |
| • Kalama | • Long View/Kelso |
| • Castle Rock | • Toledo |
| • Chehalis/Centralia | • Rochester |
| • Olympia | • Tacoma |
| • Federal Way | • Seattle |
| • Edmonds | • Lynnwood |
| • Everett | • Marysville |
| • Mount Vernon | • Burlington |
| • Bellingham | • Blaine |
| • Bellevue | • Issaquah |
| • North Bend | • Snoqualmie Pass |
| • Cle Elum | • Ellensburg |
| • Vantage | • George |
| • Moses Lake | • Ritzville |
| • Spokane | • Yakima |
| • Union Gap | • Zillah |
| • Sunnyside | • Prosser |
| • Richland | |

4.2. WSDOT is also interested in whether you need enhanced or new truck parking and services along SR-167 and the Ports of Seattle and Tacoma. How important would enhanced or new truck parking and services be at these locations?

- Very unimportant
- Somewhat unimportant
- Somewhat important
- Very important
- Don't know

4.3. Which locations for enhanced or new truck parking and services are more important to you?

- I-5, I-90, I-82
- SR 167, Port of Seattle, Port of Tacoma

4.4. How likely would you be to use the following amenities at new or expanded truck parking areas?

	Very unlikely	Somewhat unlikely	Somewhat likely	Very likely
Secured lot				
Drop yard				
Electrification/Shore Power/ Plug-in				
Fueling capabilities				
Maintenance services				
Restaurant				
Fast-food restaurant				
Convenience store				
Drivers-only area				
Showers				
Laundry room				
Exercise facilities				
Wi-Fi				
On site security				
Easy access to Interstate				
Rest rooms				
Vending machines				
Separate parking for trucks				
Paved lot				
Lighting				

- 4.5. How far would you be willing to drive off the Interstate to use a new truck parking facility?
- 4.6. How much would you be willing to pay for truck parking during your 10-hour mandatory rest period at an existing or new truck parking area?
- 4.7. How likely would you be to use an online or call-in reservation system to find available parking and reserve it?
- 4.8. How much would you be willing to pay for truck parking reserved in advance via online or call-in system?
- 4.9. If new truck parking areas included secure drop zones, how much would you be willing to pay per day to leave a trailer?

Final Comments and Contact Information

- 5.1. Would you like to receive occasional updates regarding improvements to truck parking facilities and services?
 - Yes
 - No
- 5.2. Please provide us with your name and email address if you would like to receive updates.

Your other survey answers will not be associated with your contact information.

Name:

Email:
- 5.3. Do you have any other comments that will help us improve truck parking services?

Appendix B – Truck Company Survey Questions

Company Survey

The Washington State Department of Transportation is looking for suggestions on how to improve truck parking services along I-5, I-90 and I-82. We need to better understand the truck parking and services needs of your company to develop proposed improvements for the State Legislature. As a representative of a freight carrier your help in completing this survey by March 15th is greatly appreciated.

The survey will only take about 12 minutes of your time and your answers will be completely anonymous. To best view the survey you should maximize your computer screen. Complete the survey by simply clicking and typing as appropriate. Depending on your answer to certain questions you may be skipped over some questions. Please do not go back and answer those skipped questions. Be sure to click “Submit form” at the end of the survey so that your answers will be included.

If you have any questions about the purpose of this survey, please contact Dale Talbot from WSDOT at (360) 750-6990. If you have any problems completing the survey, please contact Bruce Brown at research@prrbiz.com.

About Your Company

1.1. Please indicate what type of carrier your company is:

- For-hire carrier
- Private carrier
- Owner-operator/Independent
- Other (please specify)

1.2. Are your operations based in Washington State?

- Yes
- No

- 1.3. Please indicate how many drivers are employed by your company.
- 1
 - 2-10
 - 11-20
 - 21-50
 - 51-100
 - 101-300
 - 301-500
 - Over 500
- 1.4. In which area do your trucks primarily drive?
- Washington State
 - Pacific Northwest (Washington, Idaho, Oregon)
 - The Eleven Western States
 - Nationally
 - Internationally
 - Other (please specify)
- 1.5. Please indicate the type of trucks you use in Washington State: (check all that apply)
- Dry van
 - Flatbed
 - Refrigerated
 - Container
 - Bulk
 - Tanker - dry
 - Tanker - liquid
 - Moving van
 - Logging
 - Oversize
 - Other (please specify)
- 1.6. Are your trucks typically carry a truckload, less than a truckload, or a combination?
- Truckload
 - Less than a truckload
 - Both truckload and less than a truckload in about equal amounts
 - Other (please specify)

- 1.7. How many one-way trips per week on average do your trucks make in Washington State? Please count round-trips as two one-way trips.
- 1.8. What percentage of your fleet is transponder equipped to use "weigh in motion"? If not so equipped, please enter zero.
- % Norpass equipped:
 - % Pre-Pass equipped:
- 1.9. How important is it for your trucks to have truck parking along I-5, I-90, and/or I-82 in Washington State?
- 1.10. Overall, do you prefer public rest areas or commercial truck stops for truck parking in Washington State?
- Public rest areas
 - Commercial truck stops
 - Either works for my purposes
- 1.11. Approximately how often do you think your drivers park in areas other than public rest areas or commercial truck stops (for example, ramps, side streets, and /or weigh stations)?
- 1.12. At what time of day do your trucks typically use public rest areas or commercial truck stops? (check all that apply)
- Don't use
 - Morning
 - Afternoon
 - Evening
 - Overnight
 - Don't know
- 1.13. What is the average length of stay for your trucks at these stops?
- 1.14. Does your company own or have access to private truck parking areas in Washington State?
- Yes
 - No

- 1.15. When your trucks operate in Washington State, where do your drivers spend the majority of their 10-hour mandatory rest periods?
- Public rest area
 - Commercial truck stop
 - Private truck parking areas
 - Other (please specify)
 - Doesn't apply
 - Don't know
- 1.16. What percent of your company's trucks which operate in Washington State are oversized?
- We do not operate oversized trucks in WA State
 - 1-20%
 - 21-40%
 - 41-60%
 - 61-80%
 - 81-100%
- 1.17. What length parking space is typically required for your company's oversized trucks?
- 1.18. What width of parking space is typically required for your company's oversized trucks?
- 1.19. What height clearance is typically required for your company's oversized trucks?
- 1.20. What type of parking space is acceptable for your company's trucks? (check all that apply)
- Pull-through space
 - Back-in space
- 1.21. What are the major barriers your company faces using existing truck parking on I-5, I-90 or I-82? (check all that apply)
- Overcrowded
 - Located too far apart
 - Located in the wrong areas
 - Hard to access from the highway
 - Don't have the services I need
 - Not secure
 - Other (please specify)

- 1.22. Do some or all of your trucks have shore power capabilities (can plug into shore power and operate HVAC and other onboard equipment, either OEM or after market)?
- Yes
 - No
- 1.23. Do your trucks use any of the following idle reduction equipment or methods? (check all that apply)
- Do not use any idle reduction equipment or methods
 - Computer controls on engine that limit the duration of idle
 - Auxiliary power unit (APU) or generator
 - APU or generator with shore power capability
 - Battery based auxiliary power system
 - Battery based system with shore power capability
 - Truck stop electrification (including shore power) where available
 - Other (please specify)
- 1.24. What is your company's main reason for reducing idling?
- Save money on fuel
 - Reduce engine maintenance cost
 - Health reasons
 - Improve the environment
 - Reduce dependence on foreign oil
 - Reduce noise and vibration
 - Other (please describe)
- 1.25. What is your company's biggest barrier to using idle reduction equipment or methods?
- No barrier, already use some type of idle reduction
 - Cost of onboard equipment such as APU's, battery packs and shore power
 - Reliability of equipment
 - Cost of truck stop electrification service
 - Availability of truck stop electrification service
 - Other (briefly describe)

Use of Commercial Truck Stops

- 2.1. For COMMERCIAL TRUCK STOPS, please indicate which locations are used by your company's trucks for staging and/or waiting for destination appointments, short to medium term parking, or mandatory 10-hour rest periods. (check all that apply)

	Staging and/or waiting	Short to medium term parking (<1hr. to <10 hrs.)	10 hr. rest period
Vancouver/Longview			
Toledo/Centralia			
Tumwater/Olympia/Lacey			
Tacoma			
Everett/Marysville			
Arlington			
Bellingham/Blaine			
North Bend			
Ellensburg			
Moses Lake			
Ritzville			
Spokane			
Union Gap/Yakima			
Prosser			

Use of Public Rest Areas

- 3.1. For PUBLIC REST AREAS, please indicate which locations are used by your company's trucks for staging and/or waiting for destination appointments, short to medium term parking, or mandatory 10-hour rest periods. (check all that apply)

	Staging and/or waiting	Short to medium term parking (<1hr. to <10 hrs.)	10 hr. rest period
Gee Creek, Ridgefield			
Toutle River, Castle Rock			
Scatter Creek, Tumwater			
Maytown, Tumwater			
Sea Tac, Sea Tac			
Silver Lake, Everett			
Smokey Point, Arlington			
Bow Hill, Burlington			
Custer, Ferndale			
Price Creek, Snoqualmie			

Indian John Hill, Cle Elum			
Rye Grass, Ellensburg			
Winchester, George			
Schrag, Moses Lake			
Sprague Lake, Sprague			
Scenic View, Kennewick			
Selah Creek, Selah			
Prosser, Prosser			

Additional Truck Parking

4.1. WSDOT will be recommending several locations for enhanced or new truck parking and services along I-5, I-90, and I-82. Please indicate the TOP 3 geographic areas in which you would like new or additional truck parking and services.

- Vancouver
- Kalama
- Castle Rock
- Chehalis/Centralia
- Olympia
- Federal Way
- Edmonds
- Everett
- Mount Vernon
- Bellingham
- Bellevue
- North Bend
- Cle Elum
- Vantage
- Moses Lake
- Spokane
- Union Gap
- Sunnyside
- Richland
- Woodland
- Long View/Kelso
- Toledo
- Rochester
- Tacoma
- Seattle
- Lynnwood
- Marysville
- Burlington
- Blaine
- Issaquah
- Snoqualmie Pass
- Ellensburg
- George
- Ritzville
- Yakima
- Zillah
- Prosser

4.2. WSDOT is also interested in whether your company needs enhanced or new truck parking and services along SR-167 and the Ports of Seattle and Tacoma. How important would enhanced or new truck parking and services be at these locations?

- Very unimportant
- Somewhat unimportant
- Somewhat important
- Very important
- Don't know

4.3. Which locations for enhanced or new truck parking and services are more important to your company?

- I-5, I-90, I-82
- SR 167, Port of Seattle, Port of Tacoma

4.4. How likely would your drivers be to use the following amenities at new or expanded truck parking areas?

	Very unlikely	Some-what unlikely	Some-what likely	Very likely
Secured lot				
Drop yard				
Electrification/Shore Power/Plug-in				
Fueling capabilities				
Maintenance services				
Restaurant				
Fast-food restaurant				
Convenience store				
Drivers-only area				
Showers				
Laundry room				
Exercise facilities				
Wi-Fi				
On site security				
Easy access to Interstate				
Rest rooms				
Vending machines				
Separate parking for trucks				
Paved lot				
Lighting				

- 4.5. How far would your drivers typically be willing to drive off the Interstate to use a new truck parking facility?
- 4.6. How much would your company be willing to pay for truck parking during driver 10-hour mandatory rest periods at an existing or new truck parking area?
- 4.7. How likely would it be for your company to have your drivers use an online or call-in reservation system to find available parking and reserve it?
- 4.8. How much would your company be willing to pay for truck parking reserved in advance via online or call-in system?
- 4.9. If new truck parking areas included secure drop zones, how much would your company be willing to pay per day to leave a trailer?

Final Comments and Contact Information

- 5.1. Would you like to receive occasional updates regarding improvements to truck parking facilities and services?
- Yes
 - No
- 5.2. Please provide us with your name and email address if you would like to receive updates.
- Your other survey answers will not be associated with your contact information.
- Name:
- Email:
- 5.3. Do you have any other comments that will help us improve truck parking services?

